## **Civil Defense**

## Physicians' Responsibilities

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IF AND WHEN the nations of the world come to armed conflict to determine which of the two great economic and political structures shall prevail, it is certain that our cities will be attacked in such ways that enormous numbers of casualties will instantly make the greatest medical task in all history. If evacuation and dispersal plans are sufficiently developed, the number of casualties could be materially reduced, but another very complex problem will result from the dislocation of millions of people. Very briefly stated, the physician's responsibility in Civil Defense is to be ready, willing and prepared to fit into whatever segment of the effort he is assigned to serve, either for the care of casualties or the provision of the essential minimal medical care for the nonaffected population.

One of the first questions that no doubt comes to mind is: For what should we be prepared? The answer can be condensed into the statement that at some time or other, in some phase of the effort, physicians will be required to treat practically every condition to which the human body can be subjected. In view of the nature of the weapons that probably will be employed, by far the greatest majority of the patients will be suffering from the traumatic and thermal lesions so well known to every physician. These include lacerations, fractures, crushing injuries, penetrating wounds, trauma to organs, contusions, abrasions and flash and thermal burns. In addition, many people could also suffer from the effects of the elements-from heat exhaustion or prostration, dehydration or protracted chilling.

It is probable that psychic trauma, of individuals or groups, will be of such magnitude that even persons who are not otherwise injured will require careful attention to either restore them to a near normal state of useful participation or to prevent the development of mass reactions. Fear and anxiety form the bases of these reactions—fear engendered by the magnitude and horror of the disaster and anxiety for their own safety, for their families and friends, for their property and possessions and over the possibility of another attack. If unchecked and uncontrolled, panic can develop, during which individual and group rationalization is replaced by impulsive and frequently violent actions and re-

actions. A physician seeing people in such conditions can do much to assist in the rapid return of a fairly rational status by a demonstration of genuinely sympathetic interest and understanding, by confident reassurance, by letting them talk and thus assisting in the psychic decompression, and frequently by getting them some nourishment.

It must be recognized, though, that there will be many for whom these simple psychotherapeutic measures will be inadequate and who will require the specialized care of the psychiatrist. During the reconstruction phase, many readjustments will be necessary, when the loss of members of the family, of home, business and property is fully comprehended. Many will be able to make these readjustments, but it must be anticipated that a considerable number will need assistance in the form of psychotherapy. Many of the casualties will also require help in making the readjustments, especially the blind, the deformed and the mutilated.

Modern warfare assumes the use of atomic and thermonuclear weapons and the possible use of biological and chemical agents. Although the majority of the survivors of an atomic or thermonuclear detonation will suffer from traumatic injuries or burns, there will be some who will have radiation effects. This will be something new for American physicians. If chemical warfare is used, our physicians will have another new series of syndromes to treat. The widely publicized "nerve gases" require prompt administration of large doses of atropine. Hence, to be effective, self administration by the affected population will be necessary, with only those survivors with late symptoms coming into the casualty care system. Chemical agents were used in the first World War, but not in the second. Will they be used in the third?

The deliberate use of biological agents is a distinct possibility. In all of the wars of history until the most recent one, disease killed far more than the most ingenious weapons man could devise. In all wars of the past there was a battle against naturally occurring biological agents. Hence, if these agents are deliberately used, it is only logical to expect bacteria, viruses or toxins that are now known, although it is possible that those used may not be too familiar in our part of the world. The

first line of defense has been in existence for many years in our health departments. It is of the greatest importance that unseasonable outbreaks of the usual diseases or the appearance of significant numbers of unfamiliar diseases be reported promptly.

There of course will be all the general medical and surgical conditions that normally affect the population, including the communicable diseases. When dispersal plans are put into operation, it is to be anticipated that with crowding in improvised shelters the incidence of all communicable diseases and upper respiratory infections will increase greatly. There will also be an increase in obstetrical cases, for as experience in the last war in the bombed cities of Europe demonstrated, in addition to those women who would normally be due to go into labor, large numbers either aborted or went into labor prematurely.

Preventive medicine will be of added importance in all its phases — immunizations, segregation of active cases of certain diseases, careful attention to sanitation, supervision of the preparation of food and the assurance of the potability of water.

After the acute phase will come the long and difficult task of rehabilitation, which could very well be protracted over many years. Plastic operations to make many people more acceptable to their fellows or to improve function. Reeducation and training of the blind; revision of amputations, and procurement and instruction in the use of prosthetic appliances; physical therapy for a wide variety of injuries—these are but a few of the tasks that will confront the medical profession during the readjustment period.

In Civil Defense the basic responsibility of physicians is that of saving the greatest number of lives and of restoring the largest possible number of people to useful, productive places in society. To do this, preparation for disaster must be made long before it strikes. As a starting point, estimates must be made of the casualties to be expected, based upon what we know of the weapons to be used, of population concentrations during different times of the day, of traffic potentials of the lines of communication, of personnel and facilities distribution and the availability of supplies.

From there, plans must be drawn up that are sufficiently flexible to be made to cope with a variety of conditions, from a fairly limited disaster, either natural or man-made, to a truly major catastrophe such as would be caused by the use of a thermonuclear weapon. Plans must also be made to very quickly provide medical services for the millions of displaced persons when dispersal becomes effective. There could be many different combinations of these contingencies. Plans not only must be

flexible, but they must also be constantly revised to keep abreast of changing concepts necessitated by the development of new weapons and techniques. Included in planning there must be presumptive assignment of duties, with the realization that the conditions at the time may make it utterly impossible for any individual or group to function in the assigned capacity. Regardless of the type of practice now followed, physicians are all trained in the basic fundamentals of medicine and surgery, and must be prepared upon a moment's notice to make themselves fit into the effort wherever they are needed. There must also be a high degree of cooperation with and acceptance of allied professions and the many ancillary groups.

During disaster, the first responsibility is to the casualties. This implies that the physicians will stand fast and resist the natural impulse to flee. It also means that the normal anxieties about family, friends and possessions must be quickly overcome and that all will report for duty promptly. The destruction and confusion will prevent many from going to their assigned place of duty, and then they must willingly participate wherever the need exists. A major attack upon several of our metropolitan centers will require total mobilization of the entire state. Most of those living away from the target cities will be required to leave their homes to assist in the care of the tremendous number of casualties, leaving the smallest possible number behind to care for the most vital of the emergencies that will arise in the home communities.

Work will be done under the most primitive and frequently improvised conditions. All existing facilities will be required to expand many times beyond their normal capacity. Supply shortages will develop very quickly. All of these things emphasize the necessity of using standardized methods of treatment, the greatest of ingenuity and the determination to work far beyond what have been considered the limits of endurance. In addition to the purely professional tasks, it may also be necessary to supervise radiological, chemical and bacterial decontamination. An additional nonprofessional duty is that of safeguarding the property and valuables of those going through the casualty care system.

As to the noncasualties, minimal essential medical care must be provided for those in the nontarget communities and for the thousands of persons crowded into the mass care centers. This can probably best be accomplished by establishing a service of dispensary type, reserving hospitalization for the most urgent cases. The greatest of skill, judgment and tact will be necessary to assure that those who are actually sick get attention, to eliminate the many who feign illness for whatever reasons, and to ease

the psychic trauma. Provision will also have to be made for obstetrical care, since, as was previously stated, a considerable increase in this service must be expected.

The related medical services must also be provided, although in somewhat restricted form, for the noncasualties. Among these are public health services, including communicable disease control, mass immunizations, sanitation supervision, food and water inspection and the maintenance of vital statistical records. The importance of keeping accurate records cannot be overemphasized, especially in the mass care centers.

Some of the most difficult problems will be encountered after the immediate disaster period. Rehabilitation of the casualties has been mentioned previously. As the survivors gradually return to what had been their home communities, a system of medical care will have to be established, under the most difficult and trying conditions. Many facilities will have been destroyed. Communications will be greatly limited. Supplies and equipment will be nonexistent or available in very limited amounts. Large areas of the cities will be completely destroyed or very badly damaged. How long it will take until public utilities are provided is a matter of speculation. Controls of all kinds must be very rigid to prevent utter chaos. All of these elements will contribute to one of the most difficult tasks that the profession will have—that of continuing to provide care for those remaining in the evacuation and mass care centers and at the same time rebuilding a medical care system for those returning to their home cities.

Physicians also have continuing responsibilities to the patients they are treating at the time of attack. How much time they can give to them will depend upon the extent of the disaster and the location of the physician in relation to the devastated areas.

In limited disasters, the majority of physicians may continue to practice in their usual manner, although some will be called upon to care for the victims. It is possible that those who are in the immediate vicinity will have total temporary disruption of their practices until offices can be reestablished.

When evacuation and dispersal is effective, the extent of the dispersal will determine the degree of disruption of the usual physician-patient relationship, both in the target and in the nontarget areas. The very nature of modern urban practice is such

that it would be practically impossible for any evacuated physician to maintain contact with his evacuee patients.

The physicians in the reception areas will be faced with tremendous tasks of caring for the many thousands of people who will be in temporary residence in their areas, even if the evacuated physicians can assist. Physicians in the other nontarget areas must remain on a stand-by basis, awaiting their call to go to the assistance of the stricken areas.

In the event of a major disaster there will be total mobilization throughout the entire state. There can be no such thing as "business as usual" in any type of human endeavor, including the practice of medicine. We must be prepared to accept a complete interruption of the usual physician-patient relationship. The barest minimum of physicians will remain behind in the nonaffected communities, even at great distances from the disaster areas. Every available man and woman will be urgently needed, which will necessitate many being gone from their home communities for days. How long it will be until there is a return to anything near the previous normal can be determined only by the nature and extent of the disaster.

Finally, we have political responsibilities, both as physicians and as good citizens. An adequate, well organized and well equipped civil defense system costs millions of dollars, even at the local level. It is our duty to insist that the legislative bodies, federal, state and local, appropriate sufficient funds to assure that when the day of disaster comes, we will be prepared. The will to do something is not enough. There must be organization, direction, leadership, plans that can quickly be put into operation, and the necessary supplies and materiel. It is possible that Civil Defense will not be the effective instrument that it should be until it is given its proper stature in government. The ideal solution would seem to be the creation of a Department of Civil Defense within the federal Department of Defense, to be headed by a secretary who would rank equally with the secretaries of the Army, Navy and Air Force, and with representation on the Joint Chiefs of Staff. This is an ideal that will be difficult to accomplish; but it is so vital to the lives, welfare and property of so many millions of our fellow citizens that every physician could be proud of any part he could have in its realization.

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